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10/805,421

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Hans-Ove Hagelin

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EXAMINER

DATSKOVSKIY, SERGEY

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/805,421

Applicant(s)

HAGELIN, HANS-OVE

Examiner

Sergey Datskovskiy

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1-22 and 26-32 have been submitted for examination.
2. Claims 1-22 and 26-32 have been rejected.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 22 recites the limitation "said rules" in line 4. There is insufficient antecedent basis for this limitation in the claim. Claim 27 recites the limitation "said rules" in line 5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-14, 22 and 26-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Rasinski et al. (US Patent No. 4,959,015).

**Claim 1**

Rasinski (015) teaches a device for generating decision support for decisions which determine and/or control the behavior of an apparatus, a tangible system, or a machine (the device is disclosed as a simulator for training a pilot, see col. 1, lines 11-15), comprising:

a supervising unit arranged to handle a rule system for the behavior (Fig. 1, CPU 10; col. 2, lines 52-59), wherein the supervising unit comprises at least one storage member in which a set of rules for the behavior is stored (Fig. 1, digital memory 16; col. 2, lines 63-68),

a user interface including first means for presenting information to a user of the device (Fig. 1, display 32; col. 3, lines 22-26) and second means for inputting instructions to said supervising unit (Fig. 1, input 14, keyboard 32, trainer input 36; col. 2, lines 60-62, col. 3, lines 19-22, col. 3, lines 30-32),

the device being operable with a first automatic rule handler automatically executing said rules to control the behavior of the apparatus, the tangible system, or the machine according to a predetermined program for the rule handling (disclosed as a simulation mode, see Fig. 1, CPU 30; col. 3, lines 19-22. Rules are automatically executed; see col. 4, lines 12-14),

the device being operable with a second rule handler which enables a user, by instructions via said second means, to indicate an alternative behavior to a behavior that is to be carried out according to a rule in the set of rules that are automatically executed by the first rule handler, such that the second rule handler is activated and

executes the rule in the set of rules with the alternative behavior in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution of the other rules in the set of rules to control other behavior of the apparatus, the tangible system, or the machine (col. 3, lines 14-18), the device being further operable such that said first means at the same time is able to present information concerning the rule handling which is carried out by the first rule handler and the rule handling which is carried out by the second rule handler (col. 3, lines 32-41).

## **Claim 2**

Rasinski (015) teaches a device according to claim 1, wherein the rule system is divided into a plurality of states for different parts of said behavior (plurality of states is disclosed as threat scenarios, see col. 2, lines 56-59, Fig. 2; col. 3, lines 55-57), and wherein each state includes at least one of said rules (Fig. 4; col. 4, 53-56).

## **Claim 3**

Rasinski (015) teaches a device according to claim 2, wherein the rule system is divided into a plurality of rule blocks, each of which includes at least one rule, wherein each state includes at least one block, wherein the rules within a certain rule block relate to a certain aspect of the behavior within the corresponding state (rule blocks are disclosed as parts of a scenario, see col. 4, lines 14-15, for examples of rule blocks

such as acquisition and launch sequence. See also col. 4, lines 23-40 for a disclosure of rules being executed inside of a rule block).

#### **Claim 4**

Rasinski (015) teaches a device according to claim 2, wherein names which identify said states, rule blocks and/or rules, automatically or in response to a command entered via said second means, are presented to a user with said first means (Fig. 2; col. 3, lines 55-57; col. 3, lines 22-26).

#### **Claim 5**

Rasinski (015) teaches a device according to claim 4, further comprising means, associated with said first means, for presenting a plurality of names which concern different states, wherein the name of the state in which said first rule handler exists, is marked with a first kind of marking (Fig. 3; col. 32-41, where the first kind of marking is disclosed by the displayed information being superimposed upon other representative display format. See also col. 4, lines 18-21 where "4" is an example of a state name).

#### **Claim 6**

Rasinski (015) teaches a device according to claim 5, wherein when the second rule handler is activated by instructions from a user, the name of the state in which said second rule handler exists, is marked with a second, different kind of marking, wherein both the first and second markings are capable of being simultaneously presented by

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said first means (Fig. 3; col. 32-41, where the second kind of marking is disclosed as a regular output on a cockpit instrument display, unlike the first kind of marking which that was superimposed upon other representative display format).

**Claim 7**

Rasinski (015) teaches a device according to claim 2, wherein said first means provides a decision support window which includes at least one area which represents a state, wherein the area includes names which identify at least one distinct rule that forms a part of the state (Fig. 2; col. 3, lines 55-57. Decision support is disclosed as a scenario screen showing a mission summary page, where states are represented by threats and rules are indicated by various values associated with a threat such as range at initial engagement, ACQ to launch time, etc. For examples see col. 3, lines 57-68, col. 4, lines 1-8).

**Claim 8**

Rasinski (015) teaches a device according to claim 7, wherein said area includes at least names of a plurality of rules, wherein the name of the rule or rules which are activated for the moment according to at least one of said first and second rule handler are provided with markings which indicate that the rule or the rules in question are activated (Fig. 2; col. 3, lines 55-57. Decision support is disclosed as a scenario screen showing a mission summary page; Fig. 3, col. 4, lines 18-23 disclose the decision

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support window where the activation of rules for target acquisition of a specific threat are indicated by showing threat's position and name on the screen).

**Claim 9**

Rasinski (015) teaches a device according to claim 8, wherein when the second rule handler is activated by instructions from a user, the name of the rule or rules which are activated according to said first rule handler is marked with a first kind of marking, while the rule or rules which are activated according to said second rule handler are marked with a second, different kind of marking (Fig. 3; col. 32-41, where the first kind of marking is disclosed by the displayed information being superimposed upon other representative display format. See also col. 4, lines 18-21 where "4" is an example of a state name. The second kind of marking is disclosed as a regular output on a cockpit instrument display, unlike the first kind of marking which that was superimposed upon other representative display format).

**Claim 10**

Rasinski (015) teaches a device according to claim 7, wherein said area also includes the name of at least one block which forms part of the state (col. 4, lines 43-47 disclose displaying a name of the rule block "missile approach" that further consists of rules for counting time before encounter, dispatching flares, etc.).

**Claim 11**



Rasinski (015) teaches a device according to claim 1, further comprising means, operable in response to a command via said second means, for deactivating the second rule handler (Fig. 4, items 102, 108; col. 4, lines 57-68).

#### **Claim 12**

Rasinski (015) teaches a device according to claim 7, wherein said second means includes means for naming at least one distinct rule, the names of the rules which have been named by the user, and which form part of a certain state, being automatically shown within said area, when said area which represents the state in question is shown in said decision support window (Fig. 2, col. 3, lines 55-66. Rule names are disclosed as visual indications of numerical values that construct each rule, such as coordinates, time values, etc. Line 1 in Fig. 2 shows a selected state with its associated rule names).

#### **Claim 13**

Rasinski (015) teaches a device according to claim 7, wherein said plurality of states are organized in at least one of a network and a hierarchy of states (Fig. 2, col. 3, lines 55-66, where states are disclosed as threats listed as a hierarchy of sequential elements on the list, and named by their number in the list (see col. 4, lines 19-21)), wherein the device further includes means for allowing a user to modify the states by performing at least one of the activities which include naming states, adding states, removing states, and changing the position of the states in the network or hierarchy

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(Fig. 2, col. 5, lines 17-24), wherein when said decision support window is shown, a plurality of states are automatically shown, and wherein the states are automatically shown in accordance with the modifications of the states which the user has carried out (Fig. 2, col. 5, lines 15-17).

**Claim 14**

Rasinski (015) teaches a device according to claim 1, wherein the rule system is divided into at least one of a plurality of states (plurality of states is disclosed as threat scenarios, see col. 2, lines 56-59, Fig. 2; col. 3, lines 55-57) and rule blocks for different parts of said behavior (rule blocks are disclosed as parts of a scenario, see col. 4, lines 14-15, for examples of rule blocks such as acquisition and launch sequence. See also col. 4, lines 23-40 for a disclosure of rules being executed inside of a rule block), the device further includes means operable in response to an advance user command via said second means for defining that, for a certain state or a plurality of states and/or rule blocks, the rules which form part of the state and/or the rule block shall not be activated automatically, whereby the behavior of the apparatus, a tangible system, or a machine in these states and/or rule blocks is always handled manually (col. 5, lines 8-12, where the parts of rule handling may be excluded from automatic activation by changing the status of the countermeasures system).

**Claim 22**

Rasinski (015) teaches a storage medium for storing a computer program, wherein the storage medium carries a computer program which is such that when it is implemented in a supervising unit connected to a user interface (Fig. 1, EEPROM RAM 16; col. 2, lines 63-68), the computer program provides a first automatic rule handler automatically executing rules to control the behavior according to a predetermined program for rule handling (disclosed as a simulation mode, col. 3, lines 19-22. Rules are automatically executed; see col. 4, lines 12-14), and a second rule handler which enables a user, by instructions via said second means, to indicate an alternative behavior to a behavior that is to be carried out according to a rule in the set of rules that are automatically executed by the first rule handler such that the second rule handler is activated and executes the rule in the set of rules with the alternative behavior in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution of the other rules in the set of rules to control other behavior (col. 3, lines 14-18), wherein a first means at the same time is able to present information concerning the rule handling which is carried out by the first rule handler and the rule handling which is carried out by the second rule handler (col. 3, lines 32-41).

#### **Claim 26**

Rasinski (015) teaches a device according to claim 1, wherein said device includes means, by the execution of said rules, for automatically controlling at least a

part of the behavior of said apparatus, a tangible system, or a machine (col. 4, lines 14-17).

#### **Claim 27**

Rasinski (015) teaches a system comprising: an apparatus, a tangible system, or a machine; a device for controlling the behavior of the apparatus, a tangible system, or a machine (col. 1, lines 11-15, where the apparatus, a tangible system, or a machine is an aircraft, and the device is an interactive simulator), the device including a first automatic rule handler automatically executing said rules to control the behavior of the apparatus, the tangible system, or the machine according to a predetermined program for the rule handling (disclosed as a simulation mode, see Fig. 1, CPU 30; col. 3, lines 19-22. Rules are automatically executed; see col. 4, lines 12-14), a second rule handler which enables a user, by instructions via said second means, to indicate an alternative behavior to a behavior that is to be carried out according to a rule in the set or rules that are automatically executed by the first rule handler, such that the second rule handler is activated and executes the rule in the set of rules with the alternative behavior in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution of the other rules in the set of rules to control other behavior of the apparatus, the tangible system, or the machine (col. 3, lines 14-18), a first means at the same time is able to present information concerning the rule handling which is carried out by the first rule handler and the rule handling which is carried out by the second rule handler (col. 3, lines 32-41).

**Claim 28**

Rasinski (015) teaches a system according to claim 27, wherein when said second rule handler is activated, said apparatus, a tangible system, or a machine is controlled by this second rule handler, wherein when the second rule handler is deactivated, the control of the apparatus, a tangible system, or a machine returns to the first rule handler (col. 3, lines 42-45 disclose deactivating the simulator while switching to the manual mode; col. 3, lines 20-22 disclose switching back and forth between the simulation and manual modes).

**Claim 29**

Rasinski (015) teaches a system according to claim 27, wherein said apparatus, a tangible system, or a machine is a manned or unmanned aircraft (col. 1, lines 11-15).

**Claim 30**

Rasinski (015) teaches a system according to claim 29, further comprising a storage medium for storing a computer program (Fig. 1, EEPROM RAM 16; col. 2, lines 63-68), wherein the storage medium carries a computer program which is such that when it is implemented in the supervising unit and the supervising unit is connected to the user interface the behavior of the apparatus, a tangible system, or a machine is controlled (Fig. 1, CPU 10; col. 2, lines 52-59).

**Claim 31**

Rasinski (015) teaches a vehicle comprising a device according to claim 1 (col. 1, lines 11-15).

**Claim 32**

Rasinski (015) teaches an unmanned or manned aircraft comprising a device according to claim 1 (col. 1, lines 11-15).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasinski et al. (US Patent No. 4,959,015) in view of Cypher et al. (US Patent No. 5,566,295).

**Claim 15**

Claim 15 is depended upon claim 1 rejected under U.S.C. §102(b) above as being anticipated by Rasinski (015).

Although Rasinski (015) teaches a device according to claim 1, he fails to teach that one of the rules includes at least one predetermined and pre-programmed premise

which can either be true or false and at least one predetermined and pre-programmed conclusion, wherein each premise in the rule is assigned an indicator which can indicate three different conditions, including a first condition that the premise shall be true, a second condition that the premise shall be false and a third condition that it does not matter whether the premise is true or false, wherein at least one conclusion is carried out if all of said premises fulfill the conditions set by the assigned indicators.

However, Cypher (295) teaches a device, wherein one of the rules (col. 6, lines 48-50) includes at least one predetermined and pre-programmed premise (col. 6, lines 50-53) which can either be true or false and at least one predetermined and pre-programmed conclusion (col. 6, lines 53-58, premises are represented by "before" states which may either occur or not occur during execution, thus being either true or false, and conclusions are represented by "after" states), wherein each premise in the rule is assigned an indicator (col. 15, lines 29-41) which can indicate three different conditions, including a first condition that the premise shall be true, a second condition that the premise shall be false and a third condition that it does not matter whether the premise is true or false (col. 15, lines 50-56, where combining an expression with Boolean operators allow to specify at least three different conditions in the condition menu), wherein at least one conclusion is carried out if all of said premises fulfill the conditions set by the assigned indicators.

Rasinski (015) and Cypher (295) are analogous art since they both belong the field of graphical simulation, including a vehicle simulation. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the rules

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structure from Cypher (295) (col. 6, lines 48-58; col. 15, lines 29-41, 50-56) and combine it with the simulator software from Rasinski (015) (col. 1, lines 50-54). The motivation for doing so would have been to enable the ordinary simulation user to program a simulation without requiring specialized knowledge of computer programming languages or concepts (Cypher (295), col. 7, lines 17-20) and to enable the user to program novel simulation behaviors that had not been anticipated by the simulation creators (Cypher (295), col. 3, lines 45-47). Therefore, it would have been obvious to modify Rasinski (015) in view of Cypher (295) by combining a vehicle simulation device with a rules system.

**Claim 16**

Claim 16 is dependent upon claim 15, rejected under 35 U.S.C. §103(a) above.

Rasinski (015) fails to teach a device according to claim 15, wherein each conclusion in the rule is assigned an indicator which can indicate two different cases, a first case which indicates that the conclusion shall be carried out and a second case which indicates that the conclusion shall not be carried out. wherein a conclusion is carried out if all of said premises in the rule fulfill the conditions set by the assigned indicators and the indicator of the conclusion indicates said first case.

However, Cypher (295) teaches a device according to claim 15, wherein each conclusion in the rule (col. 6, lines 53-58) is assigned an indicator (col. 15, lines 29-41) which can indicate two different cases, a first case which indicates that the conclusion shall be carried out and a second case which indicates that the conclusion shall not be



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carried out, wherein a conclusion is carried out if all of said premises in the rule fulfill the conditions set by the assigned indicators and the indicator of the conclusion indicates said first case (col. 15, lines 29-41; col. 17, lines 17-24. Conclusion here is a resulting part of a rule, where indicator is described by a condition that has to be met for the rule to be executed).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the indicators from Cypher (295) and combine them with the simulator software from Rasinski (015) (col. 1, lines 50-54), using the same motivation as for claim 15 above.

#### **Claim 17**

Claim 17 is dependent upon claim 15, rejected under 35 U.S.C. §103(a) above.

Rasinski (015) fails to teach a device according to claim 15, including means, operable on command from a user, for showing at least one of said rules with said user interface, and further comprising means, operable by a user with the help of said second means of the user interface, for changing the indications of said indicators.

However, Cypher (295) teaches a device according to claim 15, including means, operable on command from a user, for showing at least one of said rules (col. 6, lines 48-50) with said user interface (Fig. 1, elements 14 and 16; col. 6, lines 11-13), and further comprising means, operable by a user with the help of said second means of the user interface (Fig. 1, element 14; col. 6, lines 11-12), for changing the indications of

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said indicators (Fig. 5B; col. 15, lines 42-50. Indicators are disclosed in a form of property conditions, which may be changed through a condition menu).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the interface from Cypher (295) and combine them with the simulator software from Rasinski (015) (col. 1, lines 50-54), using the same motivation as for claim 15 above.

#### **Claim 18**

Claim 18 is dependent upon claim 17, rejected under 35 U.S.C. §103(a) above.

Rasinski (015) teaches a device according to claim 17, further comprising means for changing said indications, the changing means requiring user operation of at least one depressions of at least one of a key and a button (Fig. 1, input 14, keyboard 32, trainer input 36; col. 2, lines 60-62, col. 3, lines 19-22, col. 3, lines 30-32).

#### **Claim 19**

Claim 19 is dependent upon claim 15, rejected under 35 U.S.C. §103(a) above.

Rasinski (015) fails to teach a device according to claim 15, wherein at least some of said premises and conclusions comprise at least one parameter which can be modified. wherein in response to a command from a user via said user interface the device presents a parameter window which shows at least one premise or conclusions and wherein the user using said user interface can modify the parameter or the parameters in said premises or conclusion.

However, Cypher (295) teaches a device according to claim 15, wherein at least some of said premises and conclusions comprise at least one parameters (col. 9, lines 32-34. Parameters are disclosed as properties associated with objects that may form “before” or “after” states) which can be modified, wherein in response to a command from a user via said user interface (Fig. 1, elements 14 and 16; col. 6, lines 11-13) the device presents a parameter window (Fig. 3B; col. 9, lines 38-46) which shows at least one premise or conclusions and wherein the user using said user interface can modify the parameter or the parameters in said premises or conclusion.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the parameters from Cypher (295) and combine them with the simulator software from Rasinski (015) (col. 1, lines 50-54), using the same motivation as for claim 15 above.

#### **Claim 20**

Claim 20 is depended upon claim 1 rejected under U.S.C. §102(b) above as being anticipated by Rasinski (015).

Rasinski (015) fails to teach a device according to claim 1, wherein the rule system is divided into a plurality of states, wherein each state comprises a plurality of said rules, which are divided into at least one rule blocks which concern different aspects of the state, wherein the rule or rules which form part of a certain rule block on command from a user via said user interface is shown as a rule block window.

However, Cypher (295) teaches a device according to claim 1, wherein the rule system is divided into a plurality of states, wherein each state (col. 10, lines 66-67) comprises a plurality of said rules (col. 6, lines 48-50), which are divided into at least one rule blocks (col. 10, lines 25-28) which concern different aspects of the state, wherein the rule or rules which form part of a certain rule block on command from a user via said user interface is shown as a rule block window (Fig. 3C; col. 10, lines 31-34).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the rule structure from Cypher (295) and combine them with the simulator software from Rasinski (015) (col. 1, lines 50-54), using the same motivation as for claim 15 above.

#### **Claim 21**

Claim 21 is dependent upon claim 20, rejected under 35 U.S.C. §103(a) above. Claim 21 is rejected as best understood by the Examiner.

Rasinski (015) fails to teach a device according to claim 20, wherein in said rule block window are shown all premises and conclusions which form part of the different rules which form part of the rule block, wherein for each rule in the rule block indications which indicate said conditions and cases are shown as indicators for the respective premises and conclusions.

However, Cypher (295) teaches a device according to claim 20, wherein in said rule block window (Fig. 3C; col. 10, lines 31-34) are shown all premises and conclusions

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which form part of the different rules which form part of the rule block (col. 11; lines 2-6), wherein for each rule in the rule block indications which indicate said conditions and cases are shown as indicators (Fig. 5B, item 87; col. 15, lines 42-46) for the respective premises and conclusions.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the interface from Cypher (295) and combine them with the simulator software from Rasinski (015) (col. 1, lines 50-54), using the same motivation as for claim 15 above.

### ***Response to Arguments***

Applicant's arguments filed on August 01, 2006 have been fully considered but they are not persuasive. The unpersuasive arguments made by Applicant are stated below:

In reference to Applicant's argument:

In particular, at col. 2, lines 63-68, Rasinski discloses a digital memory 16, which includes an electrically programmable memory (EEPROM) into which desired scenarios may be stored in accordance with a known tactical situation. The scenarios can be simulated and the pilot is responsible for taking various actions based on events that occur during the simulation of the scenarios. By contrast, the present invention, for example, according to claim 1, requires a first automatic rule handler automatically executing said rules to control the behavior of an apparatus, a tangible system, or a machine according to a predetermined program for the rule handling by a first rule handler. A scenario is not the same as a rule nor are the parameters that can be modified. One of skill in the art would recognize that the disclosure of the storage of scenarios and modifiable parameters does not teach the storage of rules for a behavior required by the present invention.

Examiner's response:

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It is true that a scenario is not the same as a rule. Scenario is an ordered sequence of events. Specifically, in our case scenario is a computer program for interactively simulating a desired threat condition (col. 2, lines 56-57). Therefore, a threat scenario can be defined as a set of conditions and desired responses, *i.e. a set of rules*. For a farther clarification, a rule is a condition followed by a set of actions, where the condition is optional since it can be set to always be true. This means that any computer program can be viewed as a sequence of rules.

In reference to Applicant's argument:

At col. 3, lines 19-22, Rasinski discloses receiving a manual command from a keyboard and which generates a digital signal to enter the simulation mode or revert to normal operation. At col. 4, lines 12-14, Rasinski discloses the threat scenario automatically beginning. By contrast, the present invention, for example, according to claim 1, requires that the device is operable with a first automatic rule handler that is automatically executing rules to control behavior according to a predetermined program for the rule handling. Merely entering simulation mode or automatically beginning a threat scenario is not the same as automatically executing rules according to a predetermined program for the rule handling. One of skill in the art would recognize that the disclosure of entering simulation mode, reverting to normal operation, or beginning a threat scenario does not teach automatically executing rules according to a predetermined program for the rule handling required by the present invention.

Examiner's response:

As explained in response to the previous argument, scenario is a sequence of rules implemented as a computer program. The whole process of running a simulation mode can be described as automatically executing rules according to a predetermined program for rule handling. Rules are executed automatically while a computer is running the program.

In reference to Applicant's argument:

Even if entering simulation mode or automatically beginning a threat scenario can be deemed the same as automatically executing rules according to a predetermined program for the rule handling, Rasinski fails to teach a second rule handler which enables a user, by instructions via a second means, to indicate an alternative behavior to a behavior that is to be carried out according to a rule in the set of rules that are automatically executing by the first rule handler and wherein the behavior that is to be carried out according to the rule in the set of rules is restored upon the completion of the alternative behavior. At col. 3, lines 14-18, Rasinski discloses data and control bus that couples command signals from pilot-trainee input and navigational data to a CPU for interacting with a predetermined scenario, and returns data signals representative of the scenario to a second CPU. Nothing about coupling command signals to a CPU for interacting with a predetermined scenario teaches anything about indicating an alternative behavior to a behavior for a rule of a rule handler that is automatically executing rules, or restoring the behavior for the rule at the completion of the alternate behavior.

Examiner's response:

Rasinski discloses the first rule handler as a CPU 10 (col. 2, lines 52-62) that conducts an automatic execution by running threat scenarios. The second rule handler is disclosed by Rasinski as CPU 30 (col. 3, lines 19-22), which is activated and can execute the rules in response to a command from a keyboard. Such rule execution is disclosed as generating a digital signal to enter simulation mode or revert to normal operation. Entering simulation mode or reverting to normal operation is done by executing a set of rules defined as actions performed based on a command from the user at the same time that the first CPU is executing its own set of instructions. Rules executed by the second CPU are alternative to the rules executed by the first CPU since they both affect the state of simulation. Additionally, Applicant argues that Rasinski does not disclose "*restoring the behavior for the rule at the completion of the alternative behavior*". However, this limitation is not present in any of the claims, and therefore, lies outside of scope of current Examination.

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Claims 2-14 and 28-32 stay rejected because the rejection status of the independent claims 1 and 27 did not change.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sergey Datskovskiy whose telephone number is (571) 272-8188. The examiner can normally be reached on Monday-Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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A.U. 2121



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